CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 90-040
NPDES PERMIT No. CA0029670

WASTE DISCHARGE REQUIREMENTS FOR:

KIM CAMP III
2986 OAKMEAD VILLAGE COURT
CITY OF SANTA CLARA
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

1. Kim Camp III, hereinafter called the discharger, by application dated January 23, 1990, has applied for issuance of waste discharge requirements under the National Pollutant Discharge Elimination System (NPDES).

2. The discharger owns the site located at 2986 Oakmead Village Court, Santa Clara, near the intersection of the Central Expressway and Bowers Avenue.

3. Subsurface investigations by the discharger have revealed significant levels of volatile organic chemical (VOC) pollution in the groundwater beneath and downgradient of the site.

4. Since 1982 twenty monitoring wells have been installed in an attempt to define the vertical and horizontal extent of the plume. The A aquifer plume covers an area approximately 1200 feet by 500 feet. Results from B aquifer monitoring wells both onsite and offsite indicate that the B aquifer has not been impacted.

   Analytical results collected during the third quarter of 1989 show that the A aquifer contains trichloroethene (TCE) up to 910 parts per billion (ppb), and Freon-113 up to 1600 ppb.

5. The discharger seeks to minimize the further migration of VOCs and contain affected groundwater by installing a groundwater extraction and treatment system. This system will consist of four extraction wells and a granular activated carbon adsorption treatment system to reduce VOCs in the groundwater.

   The discharger proposes to discharge from the treatment system an average of 17,000 gallons per day (gpd) and a maximum of 60,000 gpd of treated groundwater to a storm drain on Oakmead

Village Court which is a tributary to Calabazas Creek, Guadalupe Slough, and South San Francisco Bay.

6. The discharger has considered the feasibility of reclamation, reuse, or discharge to a publicly owned treatment works (POTW), as specified in Board Resolution No. 88-160. At this time, reuse or reclamation are infeasible because of the lack of either an industrial use or landscape use (the site has limited irrigated landscape). Also, the City of Santa Clara does not allow any discharges of treated ground water into their sewer system on a permanent basis. If groundwater extraction and treatment is proposed as part of the site's final remedial action plan, Site Cleanup Order No. 89-086 requires the feasibility of reuse or reinjection of the extracted groundwater to be further investigated.

7. This site is part of the Micro Storage/Intel Magnetics Superfund Site.

8. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives for Calabazas Creek and South San Francisco Bay and contains discharge prohibitions applicable to shallow water discharges in these areas.

9. The existing and potential beneficial uses of Calabazas Creek and South San Francisco Bay include:

   a) Contact and non-contact water recreation
   b) Wildlife habitat
   c) Preservation of rare and endangered species
   d) Estuarine habitat
   e) Warm fresh water and cold fresh water habitat
   f) Fish spawning and migration
   g) Industrial service supply
   h) Shellfishing
   i) Navigation
   j) Ocean commercial and sport fishing
   k) Groundwater recharge
   l) Agricultural supply

10. Effluent limitations of this Order (as shown in Section A below) are based on the Clean Water Act, the Basin Plan, State and U.S. Environmental Protection Agency (EPA) plans and policies, best available treatment economically available (BATEA), and best engineering judgement. EPA Region IX draft guidance "NPDES Permit Limitations for Discharge of Contaminated Groundwater: Guidance Document" was also considered in the determination of effluent limits.

11. The Basin Plan prohibits discharge of wastewater which has "particular characteristics of concern to beneficial uses" (a) "at any point in San Francisco Bay south of the Dumbarton Bridge" and (b) "at any point where the wastewater does not receive a minimum initial dilution of at least 10:1 or into any nontidal water, deadend slough, similar confined water, or any immediate tributary thereof."

12. The Basin Plan allows for exceptions to the prohibitions referred to in Finding 11 above when it can be demonstrated that a net environmental benefit can be derived as a result of the discharge.

13. Exceptions to the prohibitions referred to in Finding 11 are warranted because the discharge is an integral part of a program to cleanup polluted groundwater and thereby produce an environmental benefit, and because receiving water concentrations are expected to be below levels that would effect beneficial uses. Should studies indicate chronic effects, not currently anticipated, the Board will review the requirements of this Order based upon Section B.1.e. below.

14. The Basin Plan prohibits discharge of "all conservative toxic and deleterious substances, above those levels which can be achieved by a program acceptable to the Board, to waters of the Basin." The discharger's groundwater extraction and treatment system and associated operation, maintenance, and monitoring plan constitutes an acceptable control program for minimizing the discharge of toxicants to waters of the State.

15. The issuance of waste discharge requirements for the discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

16. The Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

17. The Board, in a public meeting on March 21, 1990, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. EFFLUENT LIMITATIONS

1. The discharge of waste containing constituents in excess of the following limits is prohibited:

TABLE 1

Constituent	Instantaneous Maximum Limit (µg/l)
VOC's	
Chloroform	5.0
1,1 Dichloroethene	5.0
1,1 Dichloroethane	5.0
(cis + trans)-1,2 Dichloroethene	5.0
Tetrachloroethane	5.0
1,1,1 Trichloroethane	5.0
Trichloroethene	5.0
1,2 Dichloro-1,1,2-Triflouroethane	5.0
Freon 113	5.0
Total VOCs (sum of all EPA 601 Compounds + Freon 113)	100.0
METALS	
Arsenic	20.0
Cadmium	10.0
Chromium (VI)	11.0
Copper	20.0
Cyanide	25.0
Lead	5.6
Mercury	1.0
Nickel	7.1
Silver	2.3
Zinc	58.0

2. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.

3. Toxicity: The survival of rainbow trout in 96-hour bioassays of the effluent as discharged shall be a median of 90% survival and a 90 percentile value of not less than 70% survival.

B. RECEIVING WATER LIMITATIONS

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam;

   b. Bottom deposits or aquatic growths;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

   a. Dissolved oxygen: 5.0 mg/l minimum. The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause lesser concentration(s) than specified above, the discharger shall not cause further reduction in the concentration of dissolved oxygen.

   b. pH: The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units.

   c. Un-ionized ammonia (as N): 0.025 mg/l Annual Mean
      (0.400 mg/l Maximum)

3. This discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act or amendments

thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

C. PROVISIONS

1. The discharger shall comply with all sections of this order immediately upon adoption.

2. The discharger shall comply with the Self-Monitoring Program as adopted by the Board and as may be amended by the Executive Officer.

3. The discharger shall notify the Regional Board if the self-monitoring program results indicate, or if any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited by this Order.

4. This Order includes all items of the attached "Standard Provisions and Reporting Requirements" dated December 1986 except A.10, B.2, B.3, C.8, and C.11.

5. Any noncompliance with a requirement of this Order shall be reported as stated in section C.10 of the "Standard Provisions and Reporting Requirements" referred to in C.4. above.

6. This Order expires March 21, 1995. The discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

7. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Clean Water Act, or amendments thereto, and shall become effective ten days after the date of its adoption provided the Regional Administrator, U. S. Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Steven R. Ritchie, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on March 21, 1990.

STEVEN R. RITCHIE
Executive Officer

Attachments: Self-Monitoring Program
Site Map
Standard Provisions and Reporting Requirements

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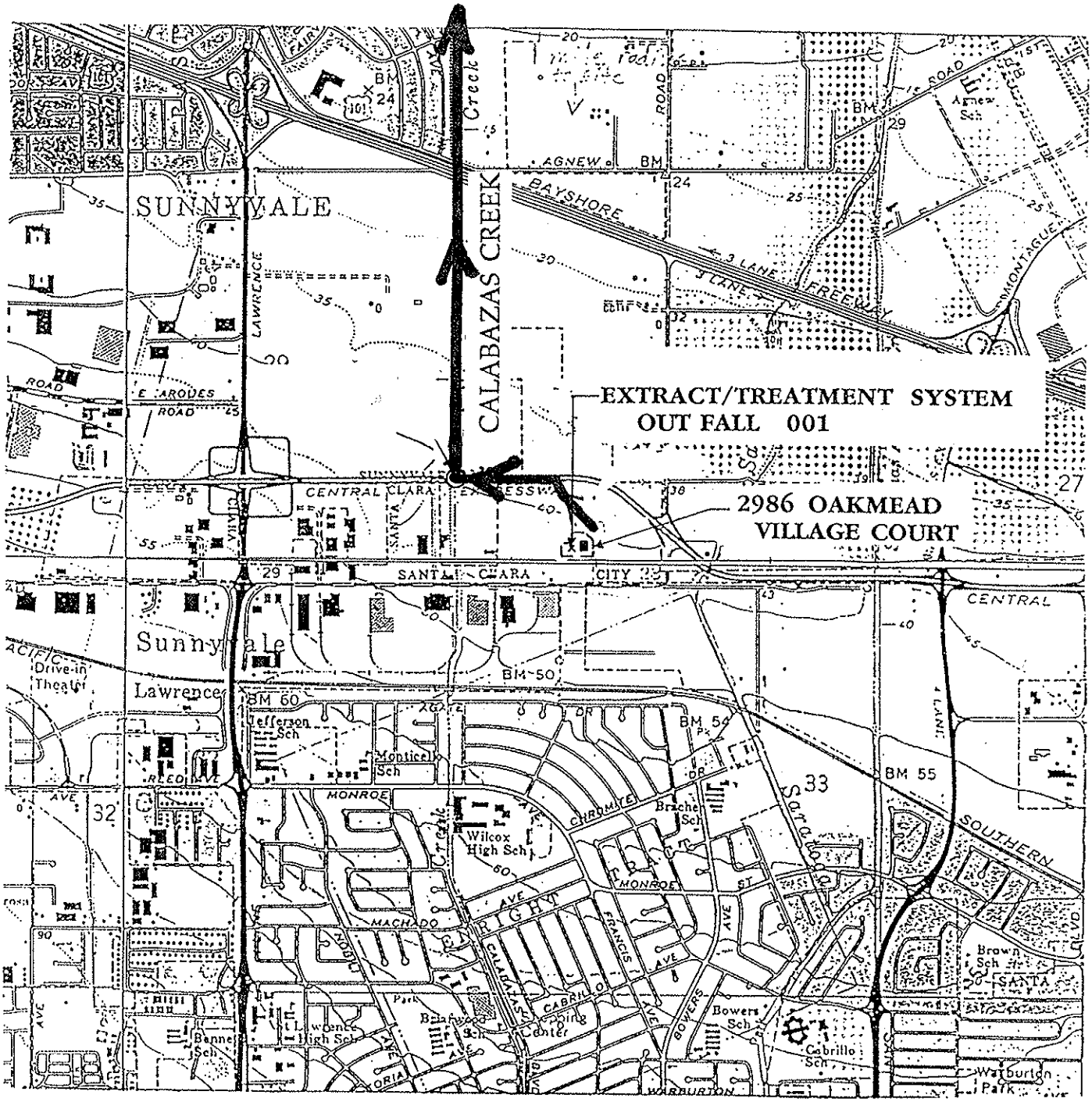
TO GUADALUPE SLOUGH
AND SAN FRANCISCO BAY



0 1/2 1 Mile

Scale Feet

SITE MAP
NPDES PERMIT No. CA0029670
KIM CAMP III
2986 OAKMEAD VILLAGE COURT
SANTA CLARA, SANTA CLARA COUNTY

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

KIM CAMP III
2986 OAKMEAD VILLAGE COURT
SANTA CLARA, SANTA CLARA COUNTY

NPDES NO. CA0029670

ORDER No. 90-040

CONSISTING OF:

PART A, dated December 1986 and modified January 1987, including Appendices A through E

PART B, Adopted: March 21, 1990

SELF-MONITORING PROGRAM

PART B

KIM CAMP III
2986 Oakmead Village Court
Santa Clara, Santa Clara County

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT

Station	Description
I-001	At a point in the ground water extraction system immediately prior to treatment in the carbon adsorption unit.

B. EFFLUENT

Station	Description
E-001	At a point immediately following treatment in the carbon adsorption unit.

C. RECEIVING WATERS

Station	Description
R-001	At a point in Calabazas Creek at least 100 feet but no more than 200 feet downstream from the storm drain discharge point of E-001 into Calabazas Creek.

II. SCHEDULE OF SAMPLING AND ANALYSIS

The schedule of sampling and analysis is provided in the attached Table A.

III. MODIFICATIONS TO PART A, DATED DECEMBER 1986 AND MODIFIED JANUARY 1987

All items of Self-Monitoring Program Part A, dated December 1986 and as modified January 1987 shall be complied with except for the following:

A. Additions to Part A: Section G.4.d.5: "Results from each required analysis and observation shall be submitted as laboratory originated data summary sheets in the quarterly self-monitoring reports. All chromatographic peaks for purgeable halocarbons and/or volatile organics shall be identified and quantified for all effluent samples. If previously unquantified peaks are identified in any effluent sample, then these peaks shall be confirmed based on analyses using chemical standards necessary to achieve proper identification and quantification. Results shall also be submitted for any additional analyses performed by the dischargers at the specific request of the Board for parameters for which effluent limits have been established and provided to the dischargers by the Board."

B. Deletions from Part A: Sections D.2.b., D.2.g., D.3.b., E.1.e.1, E.1.f., E.2.b., E.3., E.4., E.5., F.2.b., G.2., G.4.b., and G.4.f.

C. Modifications to Part A: For the following, the discharger shall comply with the Sections as changed and reported herein:

1. Section D.2.a. is changed to read:

"Samples of effluent and receiving waters shall be collected at times coincident with influent sampling unless otherwise stipulated. The Regional Board or Executive Officer may approve an alternative sampling plan if it is demonstrated that expected operating conditions warrant a deviation from the standard sampling plan."

2. Section D.2.d. is changed to read:

"If two consecutive samples of any one constituent or parameter monitored on a weekly or monthly basis in a 30-day period exceed the effluent limit or are otherwise out of compliance, or if the required sampling frequency is once per month or less (quarterly, annually or other) and the sample or

parameter exceeds the limit or is otherwise out of compliance, the discharger shall implement procedure(s) acceptable to or approved by the Board's Executive Officer, on a case by case basis."

3. Section D.2.e. is changed to read:

"If any instantaneous maximum limit is exceeded, within 24 hours of receiving the analytical results indicating the violation, a confirmation sample shall be taken and analyzed with 24 hour turn-around time. If the instantaneous maximum is violated in the second sample, the discharge shall terminate immediately, and shall not resume until the cause of the violation is found and corrected and/or the Board's Executive Officer authorizes resumption of the discharge."

4. In Section F.1, the phrase "(at the waste treatment plant)" is changed to read, "(at the location of the extraction and treatment system)".

5. Monthly written reports required in Section G.4 shall be filed monthly by the thirtieth day of the following month.

6. Section G.4.e is changed to read:

"Summary tabulations of the data shall include, for each constituent, total number of analyses, maximum, minimum, and average values for each period. Total flow data shall also be included. This information shall be prepared in a format similar to EPA Form 3320-1. This information shall be submitted only to the Regional Board:

Executive Officer
California Regional Water Quality Control Board
1800 Harrison Street, Suite 700
Oakland, CA 94612"

7. The Annual Report required in Section G.5. shall be submitted by January 30 of each year in place of the monthly report due on the same day.

IV. MISCELLANEOUS REPORTING

If any chemicals or additives are proposed to be used in the operation and/or maintenance of the ground water extraction/treatment system, the discharger shall obtain the Executive Officer's concurrence prior to use. The details

concerning such approved use shall be reported in the next periodic report submitted to the Board.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 90-040.

2. Was adopted by the Board on March 21, 1990.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the dischargers, and revisions will be ordered by the Executive Officer or Regional Board.

STEVEN R. RITCHIE
Executive Officer

Attachment: Table A

TABLE A
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	I-1		E-1		R-1									
TYPE OF SAMPLE	G		G		G									
Flow Rate (mgd)			W											
BOD, 5-day, 20°C, or COD (mg/l & kg/day)			Y											
Chlorine Residual & Dosage (mg/l & kg/day)														
Settleable Matter (ml/l-hr. & cu. ft./day)			Q		Q									
Total Suspended Matter (mg/l & kg/day)														
Oil and Grease (mg/l & kg/day)														
Coliform (Total or Fecal) (MPN/100 ml) per req't														
Fish Tox'y 96-hr. TL & Surv'l in undiluted waste			Y											
Ammonia Nitrogen (mg/l & kg/day)			V											
Nitrate Nitrogen (mg/l & kg/day)														
Nitrite Nitrogen (mg/l & kg/day)														
Total Organic Nitrogen (mg/l & kg/day)														
Total Phosphate (mg/l & kg/day)														
Turbidity (Jackson Turbidity Units)														
pH (units)			Q		Q									
Dissolved Oxygen (mg/l and % Saturation)			Q		Q									
Temperature (°C)			Q		Q									
Apparent Color (color units)														
Secchi Disc (inches)														
Sulfides (if DO<5.0 mg/l) Total & Dissolved (mg/l)														
Arsenic (mg/l & kg/day)			M/Q											
Cadmium (mg/l & kg/day)			M/Q											
Chromium, Total (mg/l & kg/day)			M/Q											
Copper (mg/l & kg/day)			M/Q											
Cyanide (mg/l & kg/day)			M/Q											
Silver (mg/l & kg/day)			M/Q											
Lead (mg/l & kg/day)			M/Q											

TABLE A (continued)

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	I-1		E-1		R-1								
TYPE OF SAMPLE	G		G		G								
Mercury (mg/l & kg/day)			M/Q										
Nickel (mg/l & kg/day)			M/Q										
Zinc (mg/l & kg/day)			M/Q										
Phenolic Compounds (mg/l & kg/day)													
All Applicable Standard Observations													
Bottom Sediment Analyses and Observations													
Total Ident. Chlor. Hydrocarbons (mg/l & kg/day)													
EPA Method 601 with Freon 113	M/Q		W/M		Q								
EPA Method 624*	Y		Y		Y								
Acetone	M/Q		W/M		Q								

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
C-X = composite sample - X hours (used when discharge does not continue for 24-hour period)
Cont = continuous sampling
DI = depth-intergrated sample
BS = bottom sediment sample
O = observation

TYPES OF STATIONS

I = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
L = basin and/or pond levee stations
B = bottom sediment stations
G = groundwaters stations

FREQUENCY OF SAMPLING

E = each occurence
H = once each hour
D = once each day
W = once each week
M = once each month
Y = once each year
V = varies; total ammonia nitrogen shall be analyzed and unionized ammonia calculated whenever fish bioassay test results fail to meet the specified percent survival
2/H = twice per hour
2/W = 2 days per week
5/W = 5 days per week
2/M = 2 days per month
2/y = once in March and once in September
Q = quarterly, once in March, June, Sept. and December
W/M = weekly for first three months after startup of operations and reduced to monthly thereafter
2H = every 2 hours
2D = every 2 days
2W = every 2 weeks
3M = every 3 months
Cont = continuous
M/Q = monthly for first six months after startup of operations and reduced to quarterly there after

* When water samples are tested by EPA Method 624, it is not necessary to test the samples by EPA Methods 601